





South Carolina DHEC's Drinking Water Newsletter

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SC DHEC • Bureau of Water

Small Systems Receive SRF Funding

By Tom McDonough, State Revolving Fund Section

hen Congress authorized the Drinking Water State Revolving Fund (DWSRF), it tried to insure that some of the loan money would go toward assisting water systems serving populations under 10,000 persons. From the beginning of the program, the DWSRF has regularly contacted every small water system with a project on the priority list. Of these, 29 systems have, at one time or another, expressed an interest in obtaining a loan. However, for a variety of reasons, loan assistance did not occur for these smaller systems.

In 2003, the SRF Priority Ranking System was revised to allow higher ranking levels for small systems. Last year, a series of meetings were held between staff from DHEC and the Budget and Control Board (BCB). These meetings resulted in an overhaul of the program's loan interest rate policy.



Interest rates are now layered for various applications. For example, in addition to the standard rate, there are lower rates for viable small systems and for capacity development.

The SRF Program is pleased to report that this year, the program succeeded in funding not one, but two, small-system drinking water projects:

Town of Fort Mill, Tega Cay and Bank Street Water Line Extensions (\$678,915)

The City of Tega Cay, served in part by the Town of Fort Mill, was having problems meeting the regulation requirement for minimum pressure in water mains. Construction of approximately 10,000 feet of 12-inch and 16-inch water lines will enable the town to maintain compliance with the Safe Drinking Water Act by providing adequate pressure in parts of the distribution system previously affected.

Lexington County, Isle of Pines Water Line Extension (\$106,198)

Lexington County Public Works, under a special 1% capacity development interest rate, assumed responsibility for taking over a non-viable water system and constructing approximately 4,000 feet of water lines, along with valves and meters, to provide the Isle of Pines community with a system which will meet drinking water standards.

Upcoming Events

WEASC & SC AWWA Environmental Conference

March 20 - 23, 2005 Myrtle Beach, South Carolina For more information, call (803) 540-1888.

SC Rural Water Association Water & Wastewater Testing/Sampling Methods

February 2005 For dates and locations, call (864) 833-5566.

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South Carolina Department of Health and Environmental Control

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AWOP: Helping Surface Water Systems Achieve Optimized Performance Goals



By Richard Welch, Manager, Drinking Water Compliance Section

Many surface water plants across the State have made significant turbidity improvements since the start of DHEC's Area-Wide Optimization Program (AWOP). Each of the surface water treatment plants in the state has been monitored and evaluated for particulate removal. Past *Newsleak* articles have listed the surface water systems that met the optimization goals. The following table shows each system that met both goals (settled & filtered) for 2003. Several of the plants have met the goals multiple years. A certificate of recognition was presented to each of these systems by DHEC Commissioner Earl Hunter, EPA Region 4 representative Dale Froneberger, and the Chief of the Bureau of Water, Alton Boozer.

| Water System | Receiving Plant | Year(s) Met |
|--------------------------|-----------------------|-------------|
| Lancaster Co. WSD | Catawba River WTP | 1 |
| City of Clinton | Clinton WTP | 5 |
| Charleston CPW | Hanahan WTP | 2 |
| Easley Central WD | Easley Central WTP | 1 |
| Edgefield Co WSA | Edgefield Co WTP | 1 |
| Greenville Water System | Adkins WTP | 6 |
| Greenville Water System | DAF WTP | 3 |
| Greenwood CPW | William Wise WTP | 5 |
| Grand Strand WSA | Waccamaw Neck WTP | 3 |
| City of Newberry | George H Connelly WTP | 3 |
| City of North Augusta | North Augusta WTP | 2 |
| Santee Cooper | Santee Cooper WTP | 3 |
| City of Seneca | Seneca WTP | 4 |
| SJWD | Springs / Lyman WTP | 6 |
| Spartanburg Water System | R.B. Simms WTP | 3 |
| City of Union | Union WTP | 3 |
| Town of Walhalla | Walhalla WTP | 2 |

The optimized goals that these surface water systems have met represent a level of treatment beyond current regulatory requirements. The goals are based on particulate removal from the sedimentation and filtration processes. The settled water goal is dependent on the raw water turbidity. If the average raw water turbidity is greater than 10 (Nephelometric Turbidity Units) NTU, then the settled water goal is 2 NTU or less, 95 percent of the time. If the raw water turbidity is less than 10 NTU, then the settled water turbidity goal is 1 NTU or less, 95 percent of the time. The filtration goal is always 0.1 NTU regardless of raw water turbidity. In addition, a new focus of the program is disinfection by-products (DBP). The DBP-focused AWOP includes distribution system performance goals (disinfectant levels, total organic carbon removal ratios, trihalomethane and haloacetic acid levels).

Data analysis has shown that surface water plants can be optimized regardless of physical or budget sizes, plant age, or raw water source type. There are no compliance issues associated with the optimization goals. DHEC does strongly encourage all water systems to strive to meet the performance goals all of the time. For more information, visit www.scdhec.gov/water/html/awop.html.

Capacity Development

Technical Assistance for Small Water Systems

Technical assistance for small water systems is now available for items such as locating source waters, analyzing treatment processes, distribution system installation and maintenance, water storage issues, and implementation of standard operating procedures.

By Fred Taylor, Compliance Assistance

apacity development refers to a water system's technical, managerial, and financial competence. The initial focus of DHEC's capacity development strategy has been the preparation of business plans for those systems that received an unsatisfactory rating on a DHEC sanitary survey. However, staff have been overwhelmed with requests for technical assistance following the issuance of system operating permits. To meet these requests, DHEC has put together a Capacity Development Team consisting of an engineer, an operator, and an accountant to provide technical assistance and financial advice to small water systems. The engineer can provide design information such as ensuring the water system is generating enough water for the population it serves. The accountant reviews business plans to ensure financial viability of a system. For example, he can review records to determine if the rates being charged cover the cost to operate the system.

The operator can provide general operation and maintenance assistance and help with questions that may arise during or after a sanitary survey is conducted.

A major component of the capacity development strategy is the sanitary survey program. The sanitary survey is a comprehensive review of operation and maintenance components of a water system. It is also an opportunity for the owner or operator of a small water system to receive one-on-one assistance to help with compliance issues.

The Capacity Development team has a team member whose focus is to provide technical assistance following sanitary surveys and the issuance of operating permits. If you have questions of a technical, managerial, or financial nature as they relate to your small water system, contact Fred Taylor at (803) 898-4241, or e-mail taylorfj@dhec.sc.gov.

Workshop Yields Results



Workhshop participants visit the SC AWWA display.

By Anne Marie Johnson, Water Outreach

The stormwater utilities, drinking water systems and other entities that are tasked with providing public education and outreach have many challenges. To help meet the water outreach challenge, DHEC's Bureau of Water, the South Carolina Soil and Water Conservation Society, the Lake and Watershed Association of South Carolina, the South Carolina Sustainable Universities Initiative, and the US EPA sponsored "Getting In Step," a

workshop on creating effective public outreach.

Over 100 participants attended the October 13th workshop. Workshop evaluations showed that participants increased their knowledge on average by 26%. They intend to use at least 77% of the information they learned, and most participants felt the workshop would help them meet the outreach goals of their organization.

Meet the New Enforcement Director



Doug Kinard was recently named as the new Enforcement Director within DHEC's Bureau of Water

oug Kinard was recently named Director of the Bureau of Water's Enforcement Division. Doug replaces Valerie Betterton who retired after more than 30 years of State service. Doug has a B.S. in Civil Engineering from Clemson University and is a registered Professional Engineer in South Carolina. Many of you probably know Doug because his previous position was Manager of the Drinking Water and Recreational Waters Compliance Section. His extensive knowledge about water treatment and water plant operation gives him a good foundation for his new position. Doug is a South Carolina native living in Pomaria, South Carolina. In his spare time, he enjoys sports and other outdoor activities.

SRF Funds Available

The State Revolving Fund (SRF) provides low-interest, long-term loans to communities for construction of drinking water and wastewater treatment and transmission facilities. Money is available in both the Drinking Water and Clean Water (wastewater) SRF programs. A share of these funds may await your drinking water or wastewater project. For more information, call (803) 898-4038, or visit www.scdhec.gov/water/html/srf.html.

Drinking Water Monitoring Notes



By Vivianne Vejdani, Drinking Water Monitoring

New Bacteriological and Disinfectant Residual Reporting Form

Effective January 1, 2005, the bacteriological report form # 1974 and the disinfectant residual report form # 2615 will be replaced by a new form that combines both bacteriological and disinfectant residual reporting into one report!

This new form makes reporting easier and quicker. Copies of the form and instructions on how to properly complete it were presented at the Annual Operator's Conference in October and the Rural Water Association Conference in November. Starting on January 1, 2005,

you should be using only the new form for both bacteriological and disinfectant residual monitoring. You can access the form at www.scdhec.gov/water/forms/d-1974.pdf

Collect Bacteriological Samples at Regular Time Intervals

on't forget, the Drinking Water Regulation states that public water systems must "...collect samples at regular time intervals throughout the month, except that a system which uses ground water (except ground water under the influence of surface water), and serves 4,900 persons or fewer, may collect all required samples on a single day if they are taken from different sites."

World Water Monitoring Day

It's All About Water!



DHEC's Stephan Bullock explains the steps in drinking water treatment to a group of students from Kelly Mill Middle School.

By Meredith Barkley, Water Watch Program Coordinator

hat were you doing on October 18th? Most likely you were struggling through another Monday's activities, but students at Kelly Mill Middle School in Blythewood were out learning about water as part of World Water Monitoring Day.

World Water Monitoring Day is celebrated each year on October 18 to educate the public about water quality and the importance of water monitoring. Volunteer monitoring groups, students, and the general public are invited to test four major indicators of water quality: temperature, pH, dissolved oxygen, and turbidity.

One hundred seventh graders from Kelly Mill spent several hours collecting monitoring data and learning about various aspects of water. Their site was on Lake Carolina which is part of a recently developed neighborhood in northeast Columbia. Staff from SC DHEC and the SC Soil and Water Conservation Society led the students through the monitoring and also shared lessons on drinking water treatment and the connection between soils and groundwater.

Along with data from sites in all 50 states and 35 countries, the students' data have been recorded on the international webpage,

www.worldwatermonitoringday.org. Congratulations, Kelly Mill, for a great day of learning!

If you'd like to plan an activity for next year's World Water Monitoring Day, or would like information on the Water Watch program, please contact Meredith Barkley at (803) 898-421,1 or e-mail barklemb@dhec.sc.gov.

Enforcement Division Report

uring July 1-September 30, 2004, the Enforcement Division issued 1 Consent Agreement, 37 Consent Orders, and 7 Administrative Orders. The Water Enforcement Division assessed approximately \$849,000 during the third quarter of 2004.

More information about enforcement activities within DHEC may be found at www.scdhec.gov/eqc/admin/html/eqcmain.html#Enforcement.

Enforcement Actions July 1-September 30, 2004

| | *(CA) | (CO) | (AO) | (EO) |
|-------------------------------|-------|------|------|------|
| Agricultural Facilities | | | | |
| Capacity Use | | | | |
| Dams and Reservoirs | | | | |
| Drinking Water | | 14 | 2 | |
| Groundwater | | | 1 | |
| NPDES | 1 | 10 | | |
| Pollution Control Act | | 8 | 1 | |
| Recreational Waters | | | | |
| Residential Wells | | 2 | | |
| Stormwater & Sediment Control | | 3 | 3 | |

^{*}Consent Agreement/Consent Order/Administrative Order/Emergency Order

Bureau of Water Telephone Numbers

Main Telephone Number

(803) 898-4300

Main Fax Number

(803) 898-4215

EQC District Offices APPALACHIA I.....(864) 260-5569 Anderson, Oconee APPALACHIA II(864) 241-1090 Greenville, Pickens APPALACHIA III(864) 596-3800 Spartanburg, Cherokee, Union CATAWBA(803) 285-7461 Lancaster, Chester, York CENTRAL MIDLANDS(803) 896-0620 Richland, Lexington, Newberry, Fairfield EDISTO SAVANNAH(803) 641-7670 Aiken, Orangeburg, Barnwell, Bamberg, Allendale, Calhoun LOW COUNTRY(843) 846-1030 Beaufort, Jasper, Colleton, Hampton PEE DEE(843) 661-4825 Florence, Dillon, Marion, Marlboro, Darlington, Chesterfield TRIDENT(843) 740-1590 Charleston, Berkeley, Dorchester UPPER SAVANNAH(864) 223-0333 Greenwood, Abbeville, Laurens, Saluda, Edgefield, McCormick WACCAMAW(843) 448-1902 Horry, Georgetown, Williamsburg WATEREE(803) 778-1531 Sumter, Kershaw, Lee, Clarendon

For Information Call . . .

Lead & Copper

Leslie Owens (803) 898-4149

Bacteriological Monitoring Program

Idris Liban (803) 898-3573

THM and SWTR compliance

Vivianne Vejdani (803) 898-4156

Radiological compliance

Patrick Metts (803) 898-3794

IOC, VOC, and SOC compliance

Wendi Smith (803) 898-3572

State Safe Drinking Water Act Fees

Susan Alder (803) 898-3554

Backflow Prevention and Cross Connection Control

John Watkins (803) 898-3567

Permitting of sources and treatment

Shawn Clarke (803) 898-3544

Permitting of water distribution lines

Wayne Stokes (803) 898-4159

Status of permit applications

Patty Barnes (803) 898-3550

Disinfectants/Disinfection By-product Rule

Richard Welch (803) 898-3546

SC DHEC Bureau of Water 2600 Bull Street Columbia, SC 29201 (803) 898-3542 www.scdhec.gov/water

